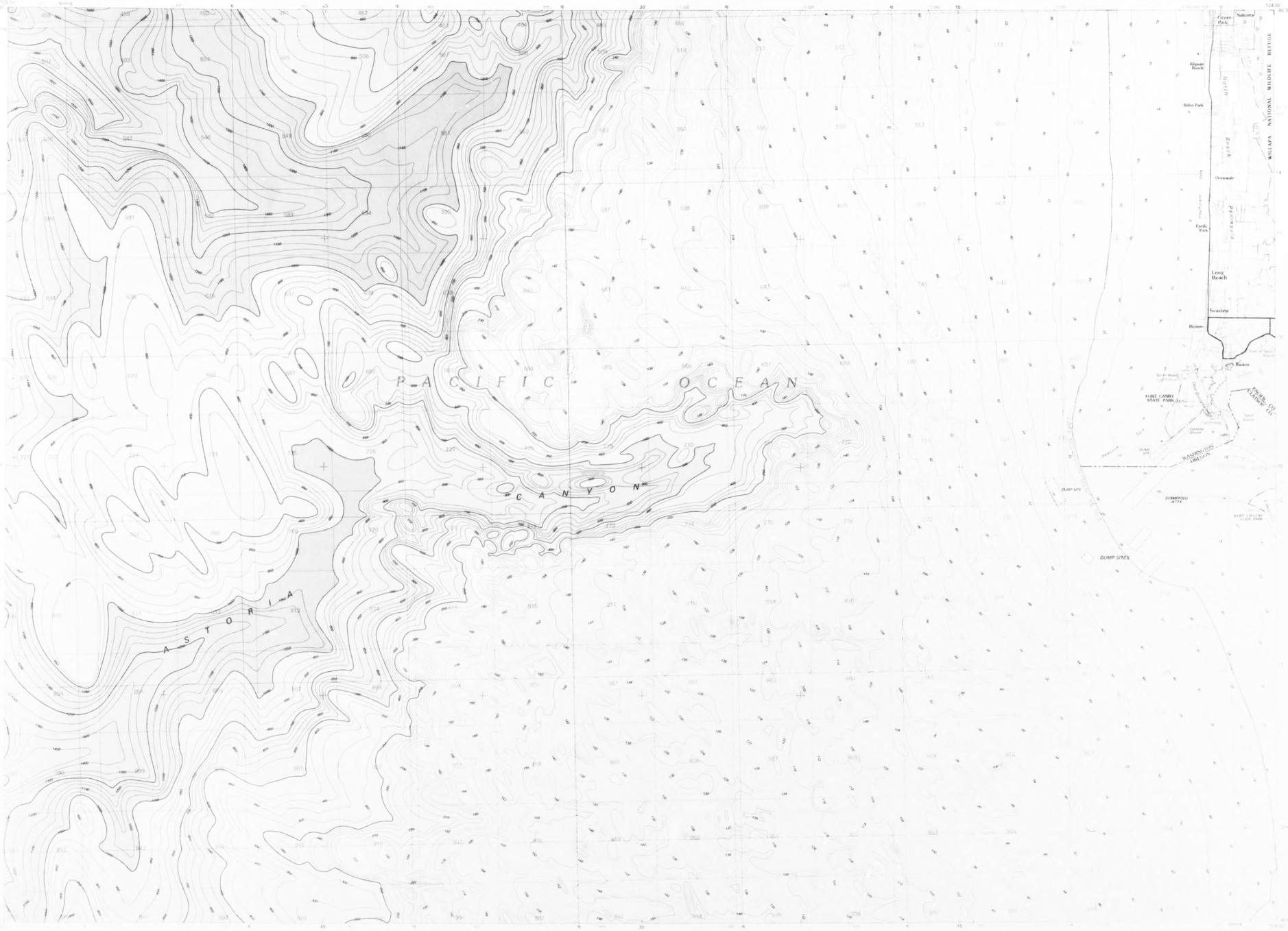
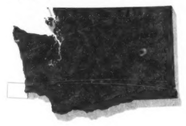
46124-A1-TB-100



Ilwaco

WASHINGTON–OREGON

1:100 000-scale *metric*
topographic—bathymetric map



- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names
- Bathymetric contours in meters

U.S. GEOLOGICAL SURVEY

1980

Produced by the United States Geological Survey and the National Ocean Service

Compiled from USGS 1:24 000-scale topographic maps dated 1954 and 1973. Planimetry revised from aerial photographs taken 1976 and other source data. Revised shorelines not field checked. Map edited 1980

Bathymetry compiled by the National Ocean Service from title coordinated hydrographic surveys. This information is not intended for navigational purposes

Mean lower low water (dashed) line and mean high water (heavy solid) line compiled by NOS from title coordinated aerial photographs. Apparent shoreline (outer edge of vegetation) shown by light solid line

Projection and 10 000-meter grid, zone 10, Universal Transverse Mercator

25 000-foot grid ticks based on Washington coordinate system, south zone (SC), North American Datum

To place on the predicted North American Datum 1983 move the projection lines 25 meters south and 98 meters east

Offshore protraction survey data shown in red, furnished by the Minerals Management Service. Heavy lines indicate limits of Outer Continental Shelf Official Protraction Diagram dated November 2, 1976. The protractions on this map are not for Federal leasing purposes. for such purposes, refer to OCS Official Protraction Diagram available from the Minerals Management Service

Limited revision and bathymetry added 1989

There may be private inholdings within the boundaries of National or State reservations shown on this map

CONTOUR INTERVAL 20 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
NATIONAL GEODETIC VERTICAL DATUM OF 1988
MEAN HIGH WATER
MEAN LOWER LOW WATER
MEAN HIGH WATER (HEAVY SOLID) AND MEAN LOWER LOW WATER (DASHED)
MEAN HIGH WATER (HEAVY SOLID) AND MEAN LOWER LOW WATER (DASHED)
THE RELATIONSHIP BETWEEN THESE DATUMS IS UNKNOWN

BASE MAP COMPILED FROM NATIONAL MAP ACCURACY STANDARDS
PHOTOREVISED 1976 AND 1980
INTERMEDIATE CONTOURS (DASHED) AND SUPPLEMENTARY CONTOURS (DOTTED) ARE AT OPTIONAL INTERVALS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.561
5	16.404
10	32.808
20	65.617
50	164.042
100	328.084
200	656.168
500	1640.420
1000	3280.840
2000	6561.680
5000	16404.199
10000	32808.398
20000	65616.797

To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM

GRID NORTH
MAGNETIC NORTH
TRUE NORTH

1° 00' MILS

TRUE and GRID NORTH
GRID and MAGNETIC NORTH
MAGNETIC and TRUE NORTH

1990
1980
1970

Diagram is approximate

SURVEYING MAPS

1 2 3
4 5
6 7 8

1 Westport
2 Chehalis River
3 Astoria
4
5 Nehalem River

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852

Topographic Map Symbols

Primary highway, hard surface
Secondary highway, hard surface
Light duty road, generally unpaved, hard or improved surface
Other road or street, trail
Route marker: Interstate; U.S.; State
Railroad: standard gauge; narrow gauge
Bridge: overpass; underpass
Tunnel: road; railroad
Built-up area: locality; elevation
Airport: landing field; landing strip
National boundary
State boundary
County boundary
National or State reservation boundary
Land grant boundary
U.S. public lands survey: range; township; section
Range; township; section line; protracted
Power transmission line; pipeline
Dam; dam with lock
Cemetery; building
Windmill; water well; spring
Mine shaft; adit or tunnel; quarry; gravel pit
Campground; picnic area; U.S. historical monument
Ruins; cliff dwelling
Distorted surface; sand; mine dump; tailings
Contours: index; intermediate; supplementary
Bathymetric contours: index; intermediate
Stream; lake; perennial; intermittent
Rapids; large and small; falls; large and small
Area to be submerged; marsh; swamp
Land subject to controlled inundation; woodland
Scrub; mangrove
Orchard; vineyard

A complete marginal diagram may be available for this map

SCALE 1:100 000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND
CONTOUR INTERVAL 20 METERS
SUPPLEMENTARY CONTOUR INTERVAL 10 METERS

KILOMETERS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
MILES 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13
1000 0 5000 10 000 15 000 20 000 METERS
5000 0 10 000 20 000 30 000 40 000 50 000 60 000 70 000 FEET

ILWACO, WASHINGTON–OREGON
46124-A1-TB-100
1980
BATHYMETRY ADDED 1989

HYDROGRAPHIC SURVEY INFORMATION

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY SOUNDING INTERVAL (METERS)
H-8613	1928	1:20 000	183 (6)
H-8633a	1929	1:20 000	18 (2.5)
H-8633b	1929	1:20 000	18 (2.5)
H-8634	1929	1:40 000	366 (6)
H-8635	1929	1:40 000	366 (6)
H-8636	1928	1:80 000	732 (12)
H-8639	1928	1:120 000	1 (3.2)
H-8640	1928	1:120 000	1 (3.2)
H-8641	1928	1:120 000	1 (3.2)
H-8645	1958	1:20 000	0.5 (0.8)
H-8646	1958	1:20 000	0.5 (0.8)
H-8647	1958	1:10 000	0.5 (1)
H-8662	1958	1:10 000	0.5 (1)

HYDROGRAPHIC SURVEY INDEX

Photographic copies of the above survey sheets may be purchased from the National Ocean Service, Distribution Branch, N/CG33, Riverdale, Maryland 20737

Exposed at low tide

Meters 0 1 Foot

DEPTH GRADIENT

100 100
200 200
300 300
1000 1000

Meters Feet